DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-019447
Date Inspected: 12-Jan-2011

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island

OSM Arrival Time: 1900
OSM Departure Time: 700
Location: Shanghai, China

CWI Name: See Below

Inspected CWI report:	☐ Yes	☑ No	☐ N/A	**CWI Present:**	☑ Yes	☐ No	
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Rod Oven in Use:**	☑ Yes	☐ No	☐ N/A
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A
Approved Drawings:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☐ Yes	☑ No	☐ N/A
				Approved WPS:	☑ Yes	☐ No	☐ N/A
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A

Bridge No: 34-0006
Component: OBG

Summary of Items Observed:
CWI Inspector: Mr. Yu Jiao

On this date CALTRANS OSM Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai China, for the purpose of monitoring welding and fabrication.

OBG Bay 14

This QA Inspector observed ZPMC welder Mr. Feng Hua Jun, stencil 066258 used shielded metal arc welding procedure WPS-345-SMAW-2G(2F)-FCM-Repair to make critical weld repairs of ultrasonic rejections to OBG segment 13BE weld SEG3011U-002. ZPMC had issued critical weld repair document B-CWR-2648 that documents the repair of this weld. This QA Inspector observed a welding current of approximately 180 amps and the base materials had been preheated with electric heaters. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Sun Lingling, stencil 048047 used shielded metal arc welding procedure WPS-345-SMAW-2G(2F)-FCM-Repair to make critical weld repairs of ultrasonic rejections to OBG segment 13BE weld SEG3011U-002. ZPMC had issued critical weld repair document B-CWR-2648 that documents the repair of this weld. This QA Inspector observed a welding current of approximately 165 amps and the base materials had been preheated with electric heaters. Items observed on this date appeared to generally

comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Yang Yunfeng, stencil 215553 used shielded metal arc welding procedure WPS-345-SMAW-3G(3F)-FCM-Repair to make a weld repair of ultrasonic rejections to OBG segment 13AE weld SEG3007AU-079. ZPMC had issued weld repair document B-WR-18919 that documents the repair of this weld. This QA Inspector measured a welding current of approximately 160 amps. QA observed the base material was preheated with electric heaters and Mr. Yang Yunfeng appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Chen Ren Zhi, stencil 058087 used shielded metal arc welding procedure specification WPS-345-SMAW-3G(3F)-FCM-Repair-1 to make OBG segment 13AE weld repair SEG3007K-034. This QA Inspector measured a welding current of approximately 160 amps and Mr. Chen Ren Zhi appeared to be certified to make this weld. This weld repair was the result of ultrasonic rejections and was documented on weld repair B-WR-19065. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Yang Yunfeng, stencil 215553 used shielded metal arc welding procedure WPS-345-SMAW-3G(3F)-FCM-Repair to make a weld repair of ultrasonic rejections to OBG segment 13AE weld SEG3007L-045. ZPMC had issued weld repair document B-WR-18556 that documents the repair of this weld. This QA Inspector measured a welding current of approximately 180 amps. QA observed the base material was preheated with electric heaters and Mr. Yang Yunfeng appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Qie Jian Zhou, stencil 067571 used shielded metal arc welding procedure specification WPS-345-SMAW-4G(4F)-FCM to make OBG segment 13AE welds SEG3007Y-422 and 424. This QA Inspector measured a welding current of approximately 160 amps and Mr. Qie Jian Zhou appeared to be certified to make this weld. ZPMC used electric heaters to preheat the base material of this weld joint. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Zhang Xiang Rong, stencil 066763 used ESAB flux cored welding procedure specification WPS-B-T-2231-ESAB to make OBG segment 14E weld SEG3019H-1-016. This QA Inspector observed a welding current of approximately 230 amps, 23.0 volts and Mr. Zhang Xiang Rong appeared to be certified to make this weld. Prior to welding ZPMC used electric heaters to preheat the base material of this weld joint. Items observed on this date appeared to generally comply with applicable contract documents

This QA Inspector observed ZPMC welder Mr. Ni Lei Jiang stencil 037723 used shielded metal arc welding procedure specification WPS-345-SMAW-4G(4F)-FCM to perform OBG segment 14E welds SEG3019H-275 and 276. This QA Inspector measured a welding current of approximately 155 amps and the base materials had been preheated with electric heating elements. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Li Yong Shui, stencil 067656 used shielded metal arc welding procedure specification WPS-345-SMAW-4G(4F)-FCM to perform OBG segment 14E welds SEG3019F-203 and 205. This QA Inspector measured a welding current of approximately 160 amps and the base materials had been

preheated with electric heating elements. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Ye Bing stencil 066733 used flux cored welding procedure WPS-B-T-2233-ESAB to make OBG segment 13AE weld SEG3019AV-027. This QA Inspector observed ZPMC QC has recorded a welding current of 250 amps and 25.98 volts. This QA Inspector observed Mr. Ye Bing appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Wang Zhengbin, stencil 216086 used shielded metal arc welding procedure WPS-345-SMAW-2G(2F)-FCM-Repair to make a weld repair of ultrasonic rejections to OBG segment 13AE weld SEG3007AT-017. ZPMC had issued weld repair document B-WR-19144 that documents the repair of this weld. This QA Inspector observed a welding current of approximately 220 amps. Items observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

See Above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact James Devey +8615000026784, who represents the Office of Structural Materials for your project.

Inspected By:	Dawson,Paul	Quality Assurance Inspector
Reviewed By:	Carreon,Albert	QA Reviewer